

REMARKS

Claims 2-13, 15, 16 and 25-27 are currently pending.

Applicants appreciate the indication that claims 25-27 are allowed.

Claim 16 stands rejected under 35 U.S.C 112, first paragraph, as being non-enabling.

Claims 2-13 and 15 stand rejected as being anticipated by Broughton (U.S. Patent No. 4,807,031).

Applicants respectfully traverse these rejections.

Formal Rejection

Applicants initially note that claim 16 constituted part of the original disclosure of this application, since it corresponds to originally filed claim 23 in parent application 09/597,209 (now U.S. Patent No. 6,411,725). Claim 23 was cancelled without prejudice prior to issuance of the 6,411,725 patent.

The Office is also respectfully directed to applicants' specification at, for example, page 4, lines 8-10 ("encoding...auxiliary information into an audio track of a video signal including at least one video object."); page 8, lines 22-26; page 9, lines 14-18; page 10, lines 3-5; etc. Surely, one of ordinary skill in the art is enabled to make or use the invention as recited in claim 16.

Withdrawal of the § 112, first paragraph, rejection is respectfully requested.

B

Claim 2 in view of Broughton

The cited Broughton passages are not understood to teach or suggest many features of claim 2. For example, the Office cites Col. 5, lines 22-27 and Col. 6, lines 21-24 as teaching steganographically encoding object information about a video object into a video signal. Yet these passages are not video object specific; rather, information is merely encoded in a viewing area, without discussion of whether the information corresponds to a specific video object. Further clarification is requested so that the Office's position can be even further distinguished on appeal.

Moreover, the Office cites Broughton at Col. 4, lines 6-14 and Col. 8, lines 45-53 as teaching a video signal steganographically encoded with at least two identifiers, with each identifier corresponding to distinct video objects in frames of the video signal, and each identifier being associated with actions relating to the corresponding video objects. The Col. 4 passage does not appear to be object specific. Similarly, the Col. 8 passage fails to teach or suggest distinct video objects, in combination with the remaining features of the claim.

Claim 2 should be allowable for at least these reasons. Other deficiencies of Broughton need not be belabored at this time.

Claim 3

As with claim 2, above, the Office cites Col. 5, lines 22-27 and Col. 6, lines 21-24 as teaching steganographically encoding object information about a video object into a video signal. Yet these passages are not video object specific; rather, information is

b

merely encoded in a viewing area, without discussion of whether the information corresponds to a specific object.

Claim 3 also recites that the object information is encoded in a watermark signal that covers a portion of a screen area of frames in the video signal where the video object is located. Even assuming, *arguendo*, that area 14d corresponds to a video object (which applicants do not concede) there is still no suggestion that Broughton's control data corresponds to or is "about" area 14d.

The many other deficiencies of Broughton with respect to Claim 3 need not be belabored at this time.

Applicants respectfully request that claim 3 be allowed.

#### Claim 4

As with claim 2, above, the Office cites Col. 5, lines 22-27 and Col. 6, lines 21-24 as teaching steganographically encoding object information about a video object into a video signal. Yet these passages are not video object specific; rather, information is merely encoded in a viewing area, without discussion of whether the information corresponds to a specific video object.

Additionally, Broughton at the cited passages is not understood to teach or suggest that object information for at least two different video objects in the video signal is steganographically encoded in different portions of frames of the video signals *where the corresponding video objects are located*, in combination with the other features of the claim. (While Broughton at Col. 7, lines 50-57 discusses multiple transducers aimed at

separate regions, it is not understood to suggest that Broughton's control data corresponds to video objects at those locations.)

Applicants respectfully submit that claim 4 should be allowed.

#### Claim 5

As with claim 2, above, the Office cites Col. 5, lines 22-27 and Col. 6, lines 21-24 as teaching steganographically encoding object information about a video object into a video signal. Yet these passages are not video object specific; rather, information is merely encoded in a viewing area, without discussion of whether the information corresponds to a specific object.

Claim 5 also recites that the object information includes screen location information indicating where the video object is located in the video signal. Knowing a predetermined position of Broughton's information, as the Office suggests on page 6, lines 3-6 of the office action, does not teach or suggest that the object information includes screen location information. (In fact, relying on a "predetermined" position teaches away from the recited claim features. If the information positioning is predetermined, there may not be a need to include such information in object information.)

Claim 5 should be allowed.

#### Claim 7

As with claim 2, above, the Office cites Col. 5, lines 22-27 and Col. 6, lines 21-24 as teaching steganographically encoding object information about a video object into a

video signal. Yet these passages are not video object specific; rather, information is merely encoded in a viewing area, without discussion of whether the information corresponds to a specific video object.

Claim 7 also recites that the object information is *encoded in a pre-recorded video object*, which forms part of the video signal. The office cites Broughton at Col. 16, lines 43-51 to show sub-fields that are selected and removed for encoding and later mixing the objects with the video signal. This seems to be an overly generous reading of the passage. Instead, the cited passage seems to discuss identifying suitable areas for encoding data, and purging the areas if they already have encoded data.

Thus, we respectfully submit that claim 7 should be allowed.

#### Claim 10

As with claim 2, above, the Office cites Col. 5, lines 22-27 and Col. 6, lines 21-24 as teaching steganographically encoding object information about a video object into a video signal. Yet these passages are not video object specific; rather, information is merely encoded in a viewing area, without discussion of whether the information corresponds to a specific video object.

Claim 10 also recites that the video object is *encoded with the object information as part of a process of capturing the video signal of physical objects*, and the object information pertains to the physical objects captured in the video signal. The cited passage (Col. 5, lines 19-35) provides control data to initiate a predefined action. In the cited illustration, the control data is used to start a motor and accelerate a car 34. The displayed car is not understood to be a representation or captured video of car 34. Thus,

the cited passages are not understood to teach *encoding the object information as part of a process of capturing the video signal of physical objects*, in combination with the other features of the claim.

Claim 10 should be allowed.

### Claim 13

As with claim 2, above, the Office cites Col. 5, lines 22-27 and Col. 6, lines 21-24 as teaching steganographically encoding object information about a video object into a video signal. Yet these passages are not video object specific; rather, information is merely encoded in a viewing area, without discussion of whether the information corresponds to a specific video object

The cited passage (Broughton at Col. 16, lines 56-61) deals with encoding an area with control data. But claim 13 recites that object information is encoded for at least two different video objects *such that the object information is synchronized with corresponding video objects* depicted in the video signal during playback.

Claim 13 should be allowed.

### Claim 15

Claim 15 recites a method for using a watermark encoded into a video signal or in an audio track accompanying the video signal. The watermark comprises information regarding a video object in the video signal. The method includes: decoding the watermark information; receiving a user selection of the video object; and executing an action associated with the video object information. The video signal includes watermark

information for at least two different video objects in the video signal, and the watermark information associates the video objects with object actions or information.

Applicants respectfully disagree with the Office's position that the cited passages teach two different video objects in the video signal, where the watermark information associates the video objects with object action or information. A link between the video object and the object action or information seems missing in Broughton.

Claim 15 should be allowed.

#### Claim 16

The formal rejection of claim 16 is addressed above. Claim 16 stands ready for allowance.

Favorable consideration is requested.

#### Remaining Dependant Claims

Each of the remaining dependant claims is believed to be patentable in its own right, in additional to being dependent upon allowable base claims. Independent consideration of each of the dependent claims is respectfully requested.

#### Invitation for Personal Interview

The Examiner is invited to contact the undersigned to discuss the claimed invention in view of the cited art.

Conclusion

The present application is believed to be in condition for allowance. Withdrawal of the above-noted rejections and early passage to issuance are respectfully requested.

(Applicant need not belabor the other shortcomings of the art at this time.).

The Examiner is invited to telephone the undersigned at 503-495-4575 if any issue remains.

Date: January 5, 2004

Respectfully submitted,

Customer No. 23735

DIGIMARC CORPORATION

Phone: 503-885-9699

FAX: 503-885-9880

By St Stewart  
Steven W. Stewart  
Registration No. 45,133